

An Efficient Learning Method to Connect Observables

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Constructing fast and accurate surrogate models is a key ingredient for making robust predictions in many topics. We present a new model, the Multiparameter Eigenvalue Problem (MEP) emulator. Our new emulator connects emulators and can make predictions directly from observables to observables. We demonstrate that our MEP emulator can connect both Eigenvector Continuation (EC) and Parametric Matrix Model (PMM) emulators. We show an immediate application to the uncertainty quantification of valence-space in-medium similarity renormalization group calculations.

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